Project Summary Sheet

Project Name: Alamo Creek Detention Basin

Tracking No: 200784117

Location: Along the northerly banks of Alamo Creek, east of Pleasant Valley Road, south of Vaca Valley Road and west of Rogers Lane, with an approximate center point of 38 22.4N, -122 01.1W

County: Solano

Project Sponsor: City of Vacaville

Point of Contact: Gary Cullen

Co-applicant(s): None

Assembly District: #8 Lois Wolk **Senate District:** #5 Michael Machado

Project Summary: This project would include the establishment of a 1,000 acre-foot detention basin up stream from the City of Vacaville. The property has already been acquired by the applicant. Through this project, there would also be an easement established on the property.

Flood Benefits: Flooding of the streets in Vacaville occurs on the order of once every 3 to 5 years. Damages to structures occur a little less frequent. During the storm in December 2005 approximately 900 residences and various public facilities were flooded.

The detention basin would hold 1,000 acre feet of flood water when there are flows that exceed 500 cfs. Water would flow in and out of the basin by gravity (i.e. no pumps will be required). The frequency of flooding along Alamo Creek will be reduced from 1 in 3 to 5 years to about 1 in 28 years.

Although small, reduction in flood damages is also expected outside the City limits and in regions of Solano County east and southeast of the City. Because of this, Solano County is in support of the project.

During the most recent storm related flood event in December 2005) there was $2,000,000 in damages to private property and $2,000,000 in damages to public property citywide. The applicant implies that the project would alleviate these costs.

Agricultural Benefits: On the currently existing site 75 acres of agricultural trees would be removed for detention basin construction. The detention basin would be earthen-

bottomed and 50 acres would be planted with hay or corn. An agricultural conservation easement will ensure that the site remains in agricultural use.

Agricultural Land Conserved: 50 acres

Wildlife Benefits:
Within the detention basin 1 acre of wetland habitat would be created. Other habitat and wildlife benefits relate to preventing catastrophic flooding of downstream areas and excessive scour in the creek channel. The upland area around the detention basin may provide some opportunity for riparian habitat restoration. During the site visit, the applicant said that 5 acres around the detention basin would be used to benefit wildlife habitat.

Wildlife Habitat Conserved: 6 acres

Total area conserved: 75 acres

Other Benefits: There would be a reduction in sediment loads and downstream erosion. Floodwater from the 2005 disaster event entered into the Solano County Water Agency's Solano Project, also known as the Putah South Canal. This canal transports drinking water to 300,000 people in 4 cities and other communities. This project would contribute to the protection of the drinking water system.

Total Cost: $5,920,000

FPCP Cost: $3,000,000

Funding Partners and Share of Cost: Local Funds contributed is $3,000,000.

1. Is there a full hydrologic report with the application, or is there simply an engineer's opinion? Either way, what is the conclusion as to the anticipated flood benefits of the project?

A Draft Solano County Water Agency Ulatis System Drainage Study including Alamo Creek was completed in October 2007 and is available at: http://www.scwa2.com/floodawareness.html.
Alamo Creek has bank-full flows every 3 – 5 years. Downstream areas are urbanized. During these events streets can be flooded. Flooding that occurred in Vacaville on December 31, 2005 was a 28-year event. The detention basin would hold enough water to protect downstream areas from a 28-year flood. Areas upstream of Interstate 80 would have 100-year protection. The Ulatis Creek watershed study includes Alamo creek flood reduction alternatives.

2. What exactly will the FPCP funds pay for?

Embankment construction '09	$1,000,000
Embankment construction '09-'10	$1,332,000
Environmental Documentation	$ 400,000
Design, Bidding, Engineering	$ 267,480
FPCP Reporting	$ 8,000

   a. If the project applicant indicated they could accept less – then what (if anything) would be cut from the project? (What is lost by providing less FPCP grant money?)

The City states they could take $662,500. The City would need the $662,500 (roughly 22%) to complete the environmental and design in the current year (2008). The City could then be looking for additional funds over multiple fiscal years to assist in covering our construction expenses.

   b. Does the applicant have access to alternate funding to replace the amount deducted from their request so that they can still spend the total amount they requested? If so, what would be the alternate funding source(s) and is the alternate funding already allocated, promised or committed?

Design and environmental could be finalized this year with a reduced budget. The City would then pursue additional funding sources over multiple fiscal years.

   c. When giving a project score credit for matching funds, how much of the funding is matched? What is the source of the matching funds and are the matching funds already committed?

Matching funds in the amount of $3, 245,960 will be contributed by the City.
Funds are being put into place by City's Finance Director to cover immediate needs and matching requirements. They are entering into obligations with Solano County as well for other construction funds needed.

3. If there is funding for acquisition of property, what is the type of ownership? Easement? Fee title? Or Both?
   a. Who will own the easement or fee title? DWR? Project applicant? Other?

The City is purchasing the property with other funds and they have offered to place a deed restriction or conservation easement on the property.

4. Does any portion of the project site have mitigation bank potential for DWR to gain mitigation credits for its maintenance program? (Note: Mitigation property would need to be within 40 miles of the disturbance area that needs to be mitigated)

There is no likely mitigation value.

5. Is the project USACE authorized under the Water Resources Development Act (WRDA)? If so, is there USACE funding for the project pursuant to WRDA? Should the USACE be fully funding the project?

No authorization or clearance has been given by USACE. The project applicant indicated that they would be happy to apply for any funding that may be available from USACE, but that they were under the impression that there was no such funding.

6. Can the management of transitory water storage on the site be optimized for flood benefit? (look to the hydrology report for info on this). Is the applicant willing to work with DWR on water management during extreme flood events?

Yes, the project is designed to optimize the amount of water storage available. The inlet is designed as a weir (only high water goes in) and the outlet is designed as a culvert that minimizes the release rate.